

Santa Clara Unit
Fire Management Plan, 2005

Assets at Risk



The primary goal of wildland fire protection in the Santa Clara Unit is to safeguard the wide range of assets found within the unit from the effects of wildfire. The assets at risk are the public and private assets that the wildland fire protection system is created and funded to protect. The following have been identified as assets at risk from wildfires and delineates their economic and non-economic assets: people, structures, timber, watershed, wildlife, unique scenic and recreation areas, range, wildlife, and air quality. The table below provides a description of the assets evaluated.

Asset at Risk	Public Issue Category	Location and ranking methodology
Fire-flood watersheds	Public safety Public welfare	Watersheds with a history of problems or proper conditions for future problems, ranked based on affected downstream population
Soil erosion	Environment	Watersheds ranked based on erosion potential
Water storage	Public welfare	Watershed area up to 20 miles upstream from water storage facility, ranked based on water value and dead storage capacity of facility
Water supply	Public health	1) Watershed area up to 20 miles upstream from water supply facility (High rank); 2) grid cells containing domestic water diversions, ranked based on number of connections; and 3) cells containing ditches that contribute to the water supply system (High rank)
Scenic	Public welfare	Four mile view shed around Scenic Highways and 1/4 mile view shed around Wild and Scenic Rivers, ranked based on potential impacts to vegetation types (tree versus non-tree types)
Timber	Public welfare	Timberlands ranked based on value/susceptibility to damage
Range	Public welfare	Rangeland ranked based on potential replacement feed cost by region/owner/vegetation type
Air quality	Public health Environment Public welfare	Potential damages to health, materials, vegetation, and visibility; ranked based on vegetation type and air basin
Historic buildings	Public welfare	Historic buildings ranked based on fire susceptibility
Recreation	Public welfare	Unique recreation areas or areas with potential damage to facilities, ranked based on fire susceptibility
Structures	Public safety Public welfare	Ranked based on housing density and fire susceptibility
Non-game wildlife	Environment Public welfare	Critical habitats and species locations based on input from California Department of Fish and Game and other stakeholders

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Game wildlife	Public welfare Environment	Critical habitats and species locations based on input from California Department of Fish and Game and other stakeholders
Infrastructure	Public safety Public welfare	Infrastructure for delivery of emergency and other critical services (e.g. repeater sites, transmission lines)
Ecosystem Health	Environment	Ranking based on vegetation type/fuel characteristics

The assets at risk were evaluated to the 450-acre scale within the Santa Clara Unit. The Department for purposes of manageability has designated the 450-acre scale. The 450-acre cells have been designated as Quad 81st. This designation is based on the sectioning of a USGS 7.5 minute quadrangle map broken down into a 9x9 grid pattern; the result is squares of 450 acres. Fire plan assessments have been made at the Q81st level, for instance, each Q81st in Santa Clara Unit has a ranking applied to it for Level of Service (LOS), Assets at Risk (AAR), fuel hazards, etc. The Santa Clara unit has 5472 of these Q81 cells. While updating the asset values during this planning cycle the unit's staff found approximately three quarters of these cells had not been assigned the base numeric value to allow the calculator to assign the proper values. The unit is working with the Fire and Resource Assessment Program GIS analysts and Sacramento Fire Plan staff to automate this procedure to streamline the entire process. These updates should be available for use in time for the next annual review due in June of 2005.

Fire protection resources are limited, primarily by budget constraints. Therefore, these resources should be allocated, in part, based on the magnitude of the assets. The assets are ranked, high, medium and low, as to their susceptibility to wildfire. The ranking is scaled to the Q81st and transferred to GIS maps. The map overlays have been evaluated by Unit staff through a series of meetings, through which identification of the areas with the highest combined asset values, map overlays and fire risk will be targeted for fire management activities. The scores for the various assets at risk were given a 1 (low) score out of a possible 9.999 (high) except for the following assets: Game wildlife, historical buildings, housing/structures, and ecosystem health were all given scores of 0 as the data is not yet available or in different stages of validation at a state level. Infrastructure, non-game wildlife, range scores were given a score of 2 and timber was given a 3 (See priority areas in the Santa Clara Unit fire plan). Many factors are involved in target area identification, including political climate of the region and suppression cost reductions.

The process of explicitly enumerating assets at risk also helps to identify who benefits from those assets. It is a premise of the California Fire Plan, on which this plan is structured, that those who benefit from the protection of an asset should pay for that protection.



General Description of the Current Fire Problem

The Santa Clara Unit does not fight fire alone. The Unit has local government agreements administered by the Unit. The Unit also cooperates fully with federal and local government firefighting agencies in addition to the Governor's Office of Emergency Services. This cooperation is formally defined and
